



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,282	09/17/2003	Hans Boman	185740-2	8635
53982      7590      12/10/2008				
General Electric Company GE Global Patent Operation PO Box 861 2 Corporate Drive, Suite 648 Shelton, CT 06484			EXAMINER  LAU, HOI CHING	
			ART UNIT  2612	PAPER NUMBER
			NOTIFICATION DATE  12/10/2008	DELIVERY MODE  ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gpo.mail@ge.com  
allyson.camaroli@ge.com

### Office Action Summary

**Application No.**

10/667,282

**Applicant(s)**

BOMAN ET AL.

**Examiner**

HOI C. LAU

**Art Unit**

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10-13, 23, 24, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-13, 23, 24, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1- 1-8, 10-13, 23-24, 26-27 have been examined.

***Response to Arguments***

2. Applicant's arguments with respect to claim 1-8, 10-13 and 26-27 have been considered but are moot in view of the new ground(s) of rejection.

***Response to Amendment***

3. The office acknowledges the changes made to the claims by applicant. The claim objection and claim rejections under 35 U.S.C. 112, second paragraph have been withdrawn.

***Double Patenting***

4. Claims 1-3, 6-7, 10-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 24, 27-28, 30, 31 of copending Application No. 10/847,185. Although the conflicting claims are not identical, they are not patentably distinct from each other because the current application claim set is a boarder version of claim 24, 27-28, 30, 31 of US copending Application No. 10/847,185 wherein the vertical frame as taught by the copending claim set could associate with the C-channel of the shipping container based upon the specific frame structure of the container would have been obvious for the narrower claims 24, 27-28, 30, 31 of copending Application No. 10/847,185 to encompass the boarder claims 1-3, 6-7, 10-12 of current applicant and direct to a similar security device and installation structure, even though the current application has slightly changed in wording.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 23-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gagnon et al. (US 5,939,982), in view of Peterson et al (US 5,453,733).

Regarding **claim 23-24**, Gagnon teaches a device for determining whether a security breach of a container has occurred by means for detecting radio frequency band exerted by a door of the container; means for establishing a baseline radio frequency band value, the baseline radio frequency band value being related to a calculated mean value from at least two radio frequency band detections; means for defining a threshold; and means for determining from the threshold and the detected whether a security breach has occurred, wherein the means for defining a threshold accumulates at least two sensed values and calculates an average value from the at least two sensed values (abstract; figure 1).

It fails to show the use of this implementation with the pressure sensor.

However, it mentions additional sensor such as pressure sensor could be used (col. 5, lines 15-25).

It would have been obvious to one of ordinary skill in the art to associate the above algorithm with the pressure sensor because it would provide enhance the efficient determination of the pressure sensing condition.

Further, It would have been obvious to one of ordinary skill in the art to pressure threshold would calculate or set as an acceptable range which take into account about the acceptable tolerance during shipment of container because the container may be pressured by external impact during the process of shipment.

In the analogous art of security system, Peterson shows the signals from intrusion detectors is evaluated wherein the alarm processing unit applies different weighting factors to the different threshold level and the signals from sensors can be varied depending upon the criteria for determining whether an alarm exist. Such alarm system calculates a range or window of acceptable alarm triggering value that would experienced with respect to the average environmental effect (col. 5, lines 52-65; col. 6, lines 25-38).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement the alarm or alert defining algorithm as taught by Peterson to the system of Gagnon because it would provide information useful in recognizing and dealing with unwanted signal changes typical of the environment which can effect the reliability of the alarm criteria and/or a trouble condition criteria.

As to **claim 26**, it corresponds to claim 23, it is therefore rejection for the similar reasons set forth in rejection of claim 23. In addition, Gagnon shows the use of pressure sensor and processor to monitor the condition of the container (figure 1; abstract).

6. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gagnon et al. (US 5,939,982), in view of Peterson et al (US 5,453,733), in further view of Marks (US 2004/0119588).

As to **claim 27**, the combination meets the limitation of claims except it fails to show the specific structure of the processor and the antenna.

In the analogous art, Marks shows determining, by the processor, whether a security breach of the door has occurred based on the changed condition of the sensor; communicating, by the processor, of a result of the determining step to an antenna coupled with the processor via a support arm and located outside of the container; and transmitting, by the processor via the antenna, of information relative to whether the security breach has occurred (figure 1; paragraphs 48,52,58,60).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the specific structures between the processor and antenna because it would facilitate the vibration sensing between the door and vertical frame of the shipping container and enhance the housing protection from the environmental impact.

***Note On Previously Indicated Allowable Subject Matter***

7. The indicated allowability of original claim 25 which is now part of the newly amended claim 26 is withdrawn in view of the newly discovered reference(s) to Peterson et al (US 5,453,733). Rejections based on the newly cited reference(s) above.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Hsiao et al. (U.S. 2003/0233189) "Mobile trailer tracking system and method"
  - b. Pedersen et al. (U.S. 5,831,519) "Traffic supervision system for vehicle"
  - c. Moskowitz et al. (U.S. 6,483,433) "Method and apparatus for notifying of receipt"
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOI C. LAU whose telephone number is (571)272-8547. The examiner can normally be reached on M- F 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin C. Lee can be reached on (571)272-2963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hoi C Lau/  
Examiner, Art Unit 2612

/Benjamin C. Lee/  
Supervisory Patent Examiner, Art Unit 2612